

ABSTRACT

Models are generated using a variety of tools and features of a model generation platform. For example, in connection with a project in which a user generates a predictive model based on historical data about a system being modeled, the user is provided through a graphical user interface a structured sequence of model generation activities to be followed, the sequence including dimension reduction, model generation, model process validation, and model re-generation.

Historical multi-dimensional data is received representing multiple source variables to be used as an input to a predictive model of a commercial system and applying transformations to the data that are selected based on the strength of measurement represented by a variable; variables are transformed into new more predictive variables, including the Bayesian renormalization of sparsely sampled variable and including the imputation of missing values for categorical or continuous variables.